Information to Include in the Application

A. **Title**: Use one of the titles below, exactly as worded, and provide a brief Project Name.

Application for Modification of Existing Permit.

Project Name
The Gifford Pinchot National Forest is applying to renew it Section 10 Permit 1175 for 5 years and add Lower Columbia coho salmon to this permit.

B. **Species**: List all species and Evolutionarily Significant Units (ESUs) and/or populations for which you request take authority.

Puget Sound Chinook Salmon, (*Oncorhynchus tshawytscha*), Status Threatened

Figure 1 shows our best estimate of the distribution of Puget Sound Chinook salmon (based on Washington Department of Fish and Wildlife, WDFW, and Gifford Pinchot National Forest Data). The upstream boundaries for Chinook salmon in the Puget Sound Evolutionary Significant Unit (ESU) are near (estimate 2.2 miles downstream from the FS boundary Thurston Creek, and 2.4 miles downstream from the FS boundary Deer Creek) the Gifford Pinchot National Forest boundary based on WDFW fish distribution data. Since this species is not on Forest the Gifford Pinchot has not been tracking its population.

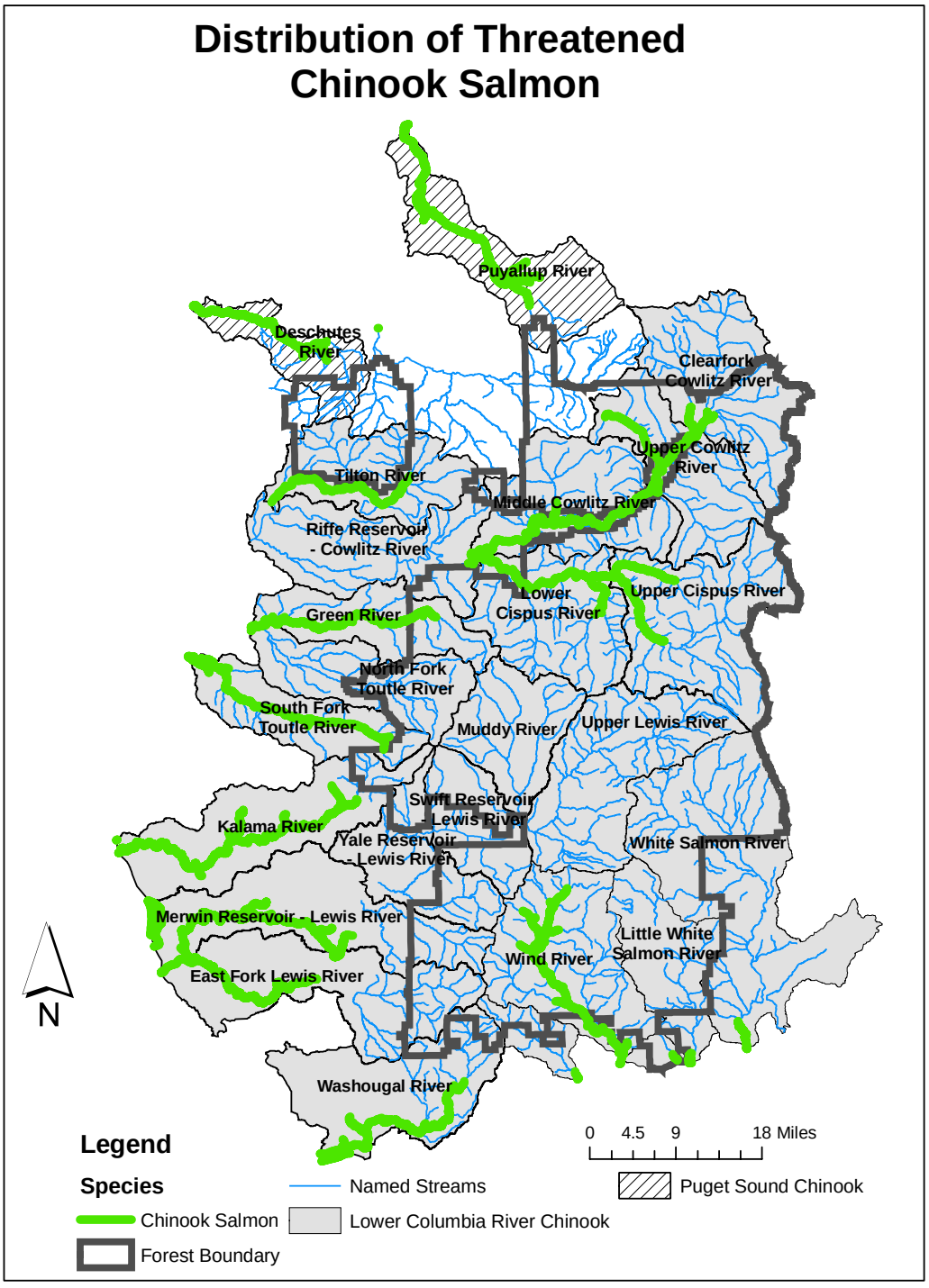

Figure 1 – Map of the documented and presumed distribution of Chinook salmon based on WDFW data.

Lower Columbia River Chinook Salmon, (*Oncorhynchus tshawytscha*), Status Threatened

Figure 1 shows our best estimate of the distribution of Lower Columbia River Chinook salmon based on Washington Department of Fish Wildlife (WDFW) fish distribution. Chinook salmon are found within the Cowlitz River system on Gifford Pinchot Forest. They have been documented in the Cowlitz River systems by WDFW, Bonneville Power Administration (BPA), US Geological Survey USGS, Tacoma Power, and Forest Service personnel. Chinook salmon above Shipherd Falls (River Mile 2) in the Wind River fifth field watershed are of hatchery origin. The only unclipped Chinook salmon in the Wind River watershed above the falls are the result of spawning hatchery strays. Chinook salmon are not found above Merwin Dam in the Lewis River system, however, this may change with future reintroduction efforts scheduled to being in 2010. Based on Forest Service personnel observations in the upper Cowlitz River (run times may be different in other areas) adults of this species arrive in the rivers in summer and spawn in early fall. The fry generally emerge from the gravel in late winter to early spring. These fry generally spend less than a year in the streams.

Lower Columbia River Coho Salmon, (*Oncorhynchus kisutch*), Status Threatened
Figure 2 (Based on WDFW and Forest Service data) shows our best estimate of the distribution of Lower Columbia River coho salmon. The distribution of coho on the Forest is extensive in the Cowlitz River system. Although WDFW's map does not show coho above Merwin dam on Lewis River, experimental populations of adult coho have been transported above Swift Reservoir and documented below Lower Falls on the North Fork Lewis River and in lower Muddy River. Adults in the Cowlitz River arrive on Forest in mid Fall and spawn through the late fall and early winter. The fry emerge from the gravel in March and April. Juveniles tend to spend about 1 year in the river.

In the Wind River basin, the primary spawning grounds for coho salmon were inundated by the Bonneville dam pool in 1938, yet a small spawning population of coho persists in the lower Winder River. WDFW believes that upstream adult coho distribution was limited to the area below Shipherd Falls. Although hatchery coho are not released in Wind River, a few hatchery coho were observed at the Shipherd Falls adult trap in the fall of 1999 during the first year of intensive adult trapping by WDFW.

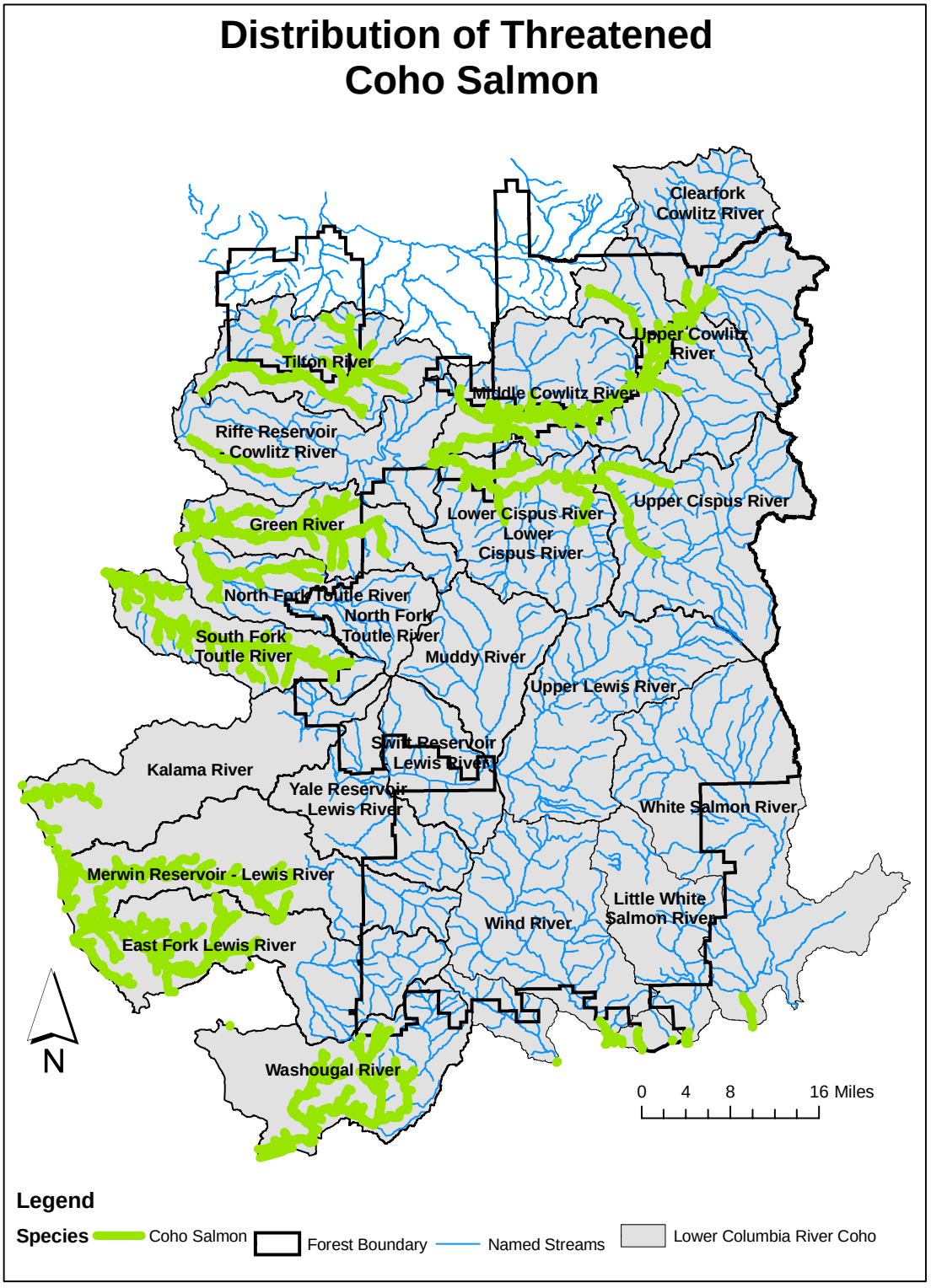

Figure 2 – Map of the documented and presumed distribution of coho salmon based on WDFW data.

Columbia River Chum Salmon, (*Oncorhynchus keta*), Status Threatened
Figure 3 (page 6) shows our best estimate (Based on WDFW data) of the distribution of chum salmon. This species is not shown on Forest nor have there been any credible reports of chum on Forest.

Lower Columbia River Steelehead (*Oncorhynchus mykiss*), Status Threatened

Figure 4 (Page 7, based on WDFW data) shows our best estimate of the distribution of Lower Columbia River steelhead. The distribution of steelhead is extensive on the Gifford Pinchot National Forest, which includes: Tilton River, Green River, North Fork Toutle River, South Fork Toutle River, Middle Cowlitz River, Upper Cowlitz River, Clearfork Cowlitz River, Lower Cispus River, Upper Cispus River, Kalama River, East Fork Lewis River, Washougal River and Wind River Watershed. We also show the potential distribution of steelhead above Merwin Dam on the Lewis River, because of the proposed reintroduction (starting approximately 2010) of this species. Both summer and winter runs of steelhead are found on the Forest. The adults spawn in mid-winter and juveniles emerge in early to mid summer. The juveniles generally spend two years in the rivers, therefore steelhead may be encountered any time of the year.

Middle Columbia River Steelhead (*Oncorhynchus mykiss*), Status Threatened

This species is not found on the Forest. See Figure 4.

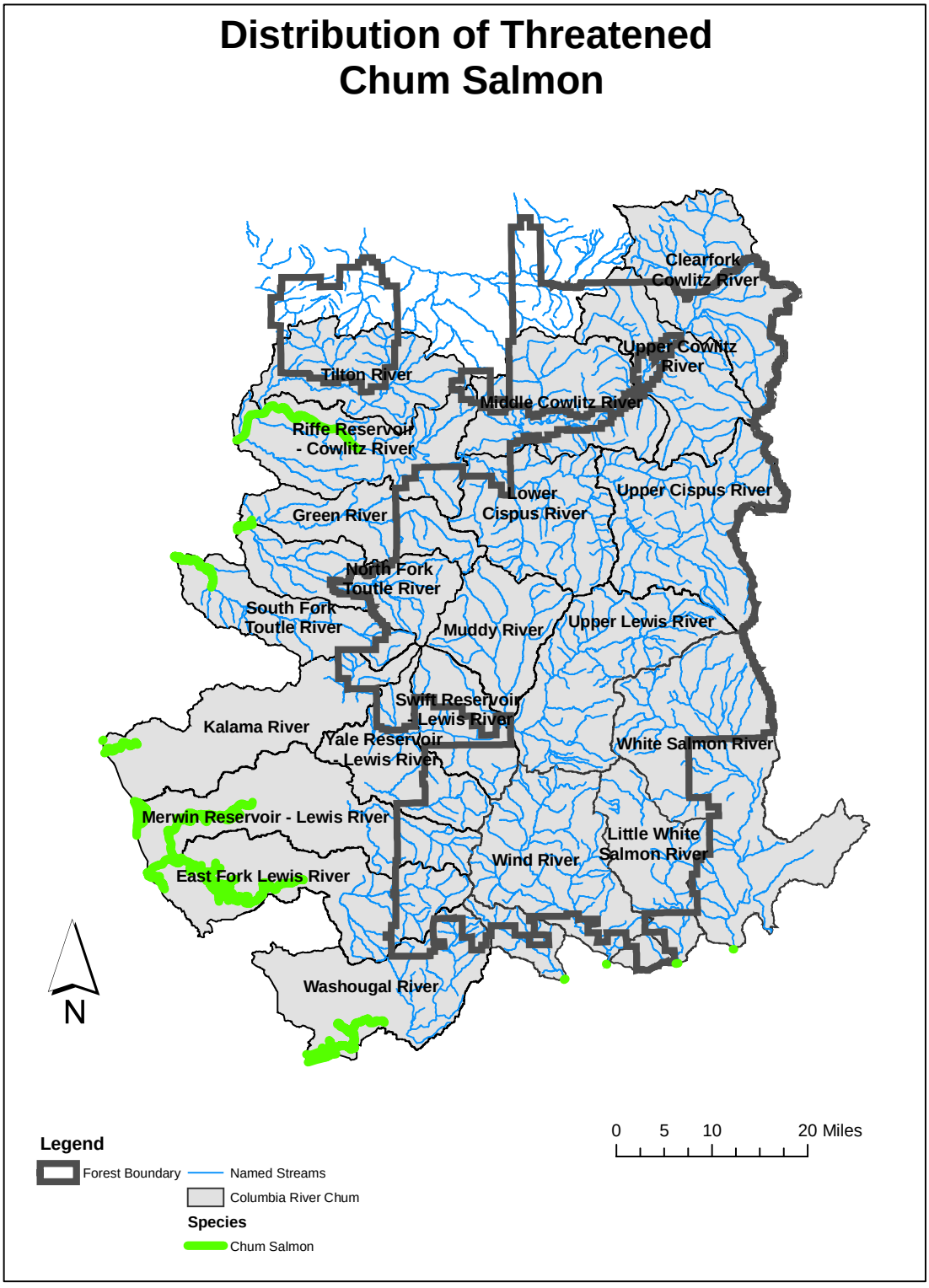

Figure 3 – Map of the documented and presumed distribution of chum salmon based on WDFW data.

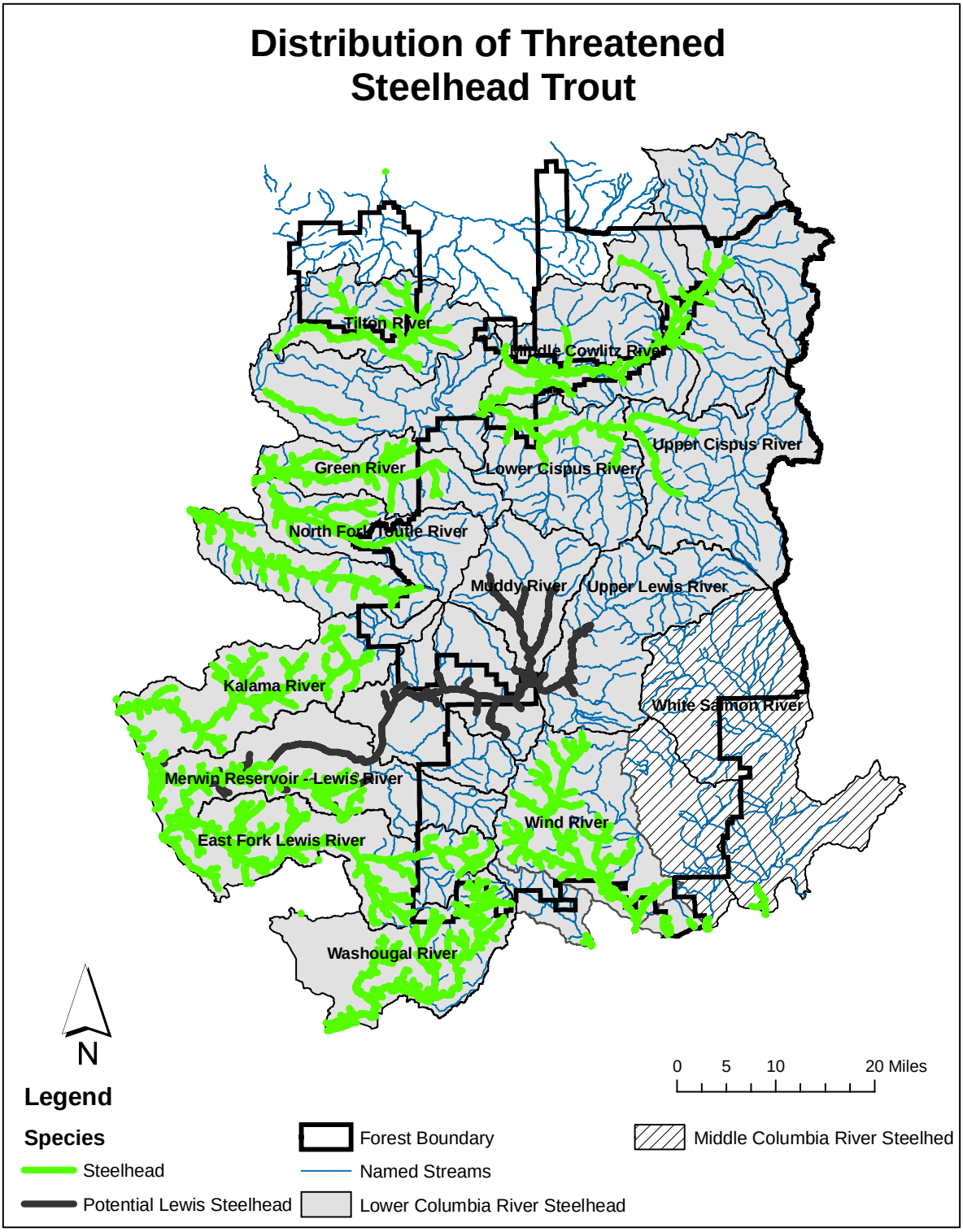

Figure 4 – Map of the documented, presumed and potential distribution of steelhead based on WDFW data.

C. Date of Permit Application: May 26, 2006

D. **Applicant Identity**: The applicant is the individual and/or agency responsible for ensuring compliance with permit conditions, and may represent a group of individuals actually performing the activities (e.g., employees, partners, agents, and/or contractors). Please include the following information about the permit applicant:

Diana Perez-Rose Forest Fisheries Program Manager
U.S. Forest Service
Gifford Pinchot National Forest
10600 NE 51 st Circle
Vancouver, WA 98682
Phone: (360) 891-5108
FAX (360) 891- 5045
dperez@fs.fed.us

If NMFS should be coordinating with a contact person different from the applicant, also include the same information (1-6 above) for the principal contact. Attach résumés, if any, at the end of the application or provide them in a separate document.

E. **Information on Personnel, Cooperators, and Sponsors**: If the same person or entity will hold several roles, you may state their address information once and refer back to it.

1. If the applicant will not be the sole person conducting the proposed activities, provide the names, email addresses, phone numbers, and résumés for each Principal Investigator and Field Supervisor. A Principal Investigator is ultimately responsible for the project and compliance with the permit conditions. A Field Supervisor (who may also be the Principal Investigator), is anyone who supervises or carries out the activities in the field without supervision, and will also be responsible for compliance with the permit conditions. Attach résumés, if any, at the end of the application or provide them in a separate document.

   Contacts

   Ken Wieman, District Fisheries Program Manager
   Cowlitz Valley Ranger District
   10024 U.S. Highway 12
   P.O. Box 670
   Randle, WA 98377
   (360) 497-1141

Adam Haspiel, District Fish Program Manager
Mount St. Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98601
(360) 449-7833

Stephanie Caballero, District Fisheries Biologist Trainee
Mt Adams Ranger District
2455 Highway 141
Trout Lake, WA 98650
(360) 395-3416

Bengt Coffin, Aquatics Program Manager
Mt Adams Ranger District
2455 Highway 141
Trout Lake, WA 98650
(360) 395-3425

Catherine Serres
Mt. Hood NF And Gifford Pinchot , Stream Inventory Coordinator
595 NW Industrial Way
Estacada, OR 97023
(503) 630-8784

2. To the extent possible, provide a list of field personnel.

Bryce Michaelis, Fisheries Technician
Mount St. Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98601

Robert (Terry) T Lawson, Fisheries Technician
Cowlitz Valley Ranger District
10024 U.S. Highway 12
P.O. Box 670
Randle, WA 98377
(360) 497-1170

Patrick James Byrne, Fisheries Technician
Mt Adams Ranger District
2455 Highway 141
Trout lake, WA 98650

Kenneth Meyer, North Zone Data Steward
Mount St. Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98601
(360) 449-7868

Heidi Vogel
Fish Biologist Trainee/Graduate Student
Olympia, WA

3. Provide the name, title, agency, phone number, and any other appropriate contact information for all sponsors, cooperating institutions, etc.

The Gifford Pinchot National Forest often cooperates with other entities and agencies including but not limited to Washington Department of Fish and Wildlife (WDFW), Bonneville Power Administration (BPA), and US Geological Survey (USGS). When we do work with these agencies we are working under their Section 10 permits. We will submit an addendum if we have any cooperators work under this permit.

4. If the proposed activities will be conducted by a contractor, provide a statement that a qualified member of your staff (include name(s) and qualifications) will supervise or observe the taking. Include a copy of the proposed contract or a letter from the contractor indicating agreement to operate under any and all permit conditions, should a permit be granted.

The Gifford Pinchot may contract out the Level II Stream Surveys. Catherine Serres will likely supervise the contract (see Resume at the end of the contract for qualifications).We will submit a statement from the contractor indicating agreement to operate under any and all permit conditions.

5. Provide a description of the arrangements for the disposition of any tissue samples, dead specimens, or other remains. If you will not retain samples, state that samples will be returned to their capture site (see section H.2.). If you are going to retain tissue samples (including whole fish), either in a museum or other institution for the continued benefit to science, include information on where the samples will be stored, transferred, and how/when/where they will be disposed. Include the list of researchers, laboratories, museums, and/or institutional collections that would receive these tissue samples or specimens. Please include name, address, contact, and phone number for each.

Samples will be returned to the capture site.

6. For transport and long-term holding of listed species (see Section I), provide the qualifications and experience of all staff responsible for care without supervision, including a written certification from a licensed veterinarian knowledgeable about the requested species (or similar species), or from a recognized expert on the species (or similar species) that he/she has personally reviewed the criteria for transporting and maintaining the animal(s) and that in his/her opinion they are adequate to provide for the well-being of the animal. Include the name, address, email, and phone number of this veterinarian, consulting expert, or equivalent who will be available during the proposed activities.

   Not Applicable

F. **Project Description, Purpose, and Significance**: Describe the purpose of your study or project. If available, attach a copy of the formal project proposal or contract, including the contract number, to your application. You may reference the appropriate section of the proposal/contract in response to a particular question.

1. **A justification of the objective(s):**
   The GPNF's Land and Resource Management Plan (as ammended by the Northwest Forest Plan) requires accurate assessments of fish habitat condition and fish species' presence and distributions for streams on National Forest System lands. This information is used in broad-scale analyses (i.e., watershed analysis) as well as project-level planning (i.e., timber sales, restoration projects, etc.). The GPNF's Land and Resource Management Plan (Chapter V, page 7) identifies monitoring and inventory of both habitat conditions and fish populations in streams across the forest as required under the National Forest Management Act of 1976. Information obtained from presence/absence surveying is used in both watershed analysis-and project-level planning to determine proper riparian reserve boundaries. The presence of fish requires a riparian reserve to extend at least two site potential tree heights from both sides of a stream as opposed to only one site potential tree height for non-fish bearing streams.

2. A statement of whether or not the proposed project or program responds directly or indirectly to a recommendation or requirement of a Federal agency (Include citations if applicable). Identify any secured or proposed Federal funding source(s) for the proposed activities, including names, addresses, and phone numbers of the sponsors, cooperating institutions, etc.

Knowing the distribution of fish species is vital evaluation of effects of Forest Service activities on fish populations, particularly populations of threatened and endangered species. Without this information the consultation process for Forest Service projects is more complex an incomplete.

3. A statement of whether or not the proposed project or program has broader significance than the individual project's goals, or is part of a larger scale research management or restoration plan (Include citations if applicable).

The information gained in the Level II Surveys, Project Site Surveys, and Redd/Spawner counts is shared with the Washington Department of Fish and Wildlife (WDFW), National Marine Fisheries Service (NMFS/NOAA Fisheries), Bonneville Power Administration (BPA) and others for habitat restoration, species reintroduction monitoring and species recovery planning.

4. A description of any relationships or similarities of the proposed activities to other proposed or ongoing projects and programs, and whether the potential exists to cooperate and coordinate with other similar studies or activities. (Include citations if applicable); and

The Gifford Pinchot National Forest Cooperates with WDFW, BPA and the US Geological Survey (USGS) in counting spawning fish and redds.

5. A justification for using listed species in the study or activities, and a discussion of possible alternatives to using listed species.

The data gathered in the Gifford Pinchot National Forest's program is used to determine the distribution of listed species, which is a requirement for Endangered Species Act consultation and other planning processes, using surrogate species would not meet this objectives of program.

G. **Project Methodology**: Provide a detailed description of the project, or program, in which the listed species is to be used, including:

Level II Stream Inventory - This includes the routine inventory of stream habitat and determination of the distribution of fish species.). As part of the Gifford Pinchot National Forest's Level II fish habitat surveys and fish sampling is conducted on streams across the Forest to assess habitat quality and fish species' ranges and distributions. These data are used by the GPNF for a variety of purposes, including consultation under Section 7 of the Endangered Species Act for proposed land management actions with both the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). The act of conducting physical habitat inventories is currently being consulted on under Section 7 of the Endangered Species Act with both NMFS and USFWS. Fish sampling is also conducted on small, perennial streams around proposed project areas to confirm presence or absence of fish. Presence/absence surveys mayor may not be conducted in conjunction with the Level II Stream Inventory on these small, perennial streams.

Biological technicians and biologist walk up a stream while measuring habitat dimensions and determining the presence or absence of fish species. Snorkeling is principle method of determining fish presence, but when snorkeling is not practical single pass backpack electrofishing or seining are used.

In rare occurrences when electrofishing are used the captured individuals are held for short time periods (generally 5 to 10 minutes) in bucket with cold clean water. Since these are presence absence surveys the electrofishing or seining activities are stopped when we have discovered the species that are present at a site. The individuals are counted by broad (100 mm) size class or year class, no samples are taken and no attempt is made to derive population estimates. Captured individuals are carefully released once the sampling has stop and capture individual have recovered.

This sampling generally occurs between July 4th and October 30th. The crews rarely spend more than 5 minutes sampling a single site.

The areas to be surveyed are driven by data needs and budget. The Gifford Pinchot National Forest is concentrating its efforts on the Lower Cispus River Watershed, Wind River Watershed, and Lewis River Watershed between Swift Reservoir, and Lower Falls for 2006. The Gifford Pinchot National Forest anticipates conducting up to 54 miles of Level Survey in 2006 and does not expect this level to increase in future years.

The alternatives to Level II Inventory are review of the existing data, or limiting surveys to less intensive surveys. We have chosen to do Level II inventories, because the existing data is either incomplete, non-existent, or out of date, all of which will likely lead to incorrect conclusions about the condition of the habitat or extent of species distribution. Less intensive or survey often miss key data points or do not cover broad enough area to gain the general picture of habitat.

The least effect would be from snorkeling and physical habitat measure where the fish may swim for cover when they see the surveyors or are disturbed by turbid water created by walking in the stream. The stress would last generally less five minutes.

If electrofishing or seining is deemed necessary level of harassment increases greatly as the fish are capture placed in temporary holding recovery container and then released. Both electrofishing and seining techniques have the potential for injuring or killing fish. The potential injuries include de-scaling during handling process to extreme of crushing or breaking of spines. Recognizable injuries are rare and methods are change or sampling is stopped when they are observed.

There is also the danger the surveyors may disturb an unrecognized redd. The surveyor may step on an unseen redd and dislodged or crush some eggs.

Project Site Surveys – This includes the checking of project sites on unsurveyed (see Level II Stream Inventory) streams. These are spot surveys for the presence of fish. They are typically conducted where there is need to modify a stream channel with large machinery and there is a lack of fish inventory data. Snorkeling or surface observations are the preferred methods of determining fish presence, but when snorkeling is not practical (small stream size) single pass electrofishing or seining are used. Biologists and/or biological technicians will search for until fish are found or the project area (typically ¼ mile above and below a site) has been covered.

The timing and location of these surveys is driven by the project and is unpredictable. We anticipate two or three request per each of the three districts per year.

The alternative to project surveys is to review the existing information. The reason for doing project site survey is because the existing data is incomplete or inconclusive. Knowing if a species is present is the key to minimizing the harm to a species during project implementation.

The potential for take is same as for the Level II surveys.

Spawner or Redd Counts- These projects are often partnerships with other agencies or groups (ex., WDFW, US Geological Survey, and Bonneville Power Administration), and are cover under those agencies sampling permits but are sometimes (rarely) Forest Service only projects. The Forest Service uses this data to identify spawning areas for project analysis and the health of populations. Biologist and/or technicians will walk or snorkel sections of stream a count the number or adult observed. The majority of this work is completed under other their permits.

By nature these projects occur during the spawning season. The locations can vary from spawning index reaches on major streams to investigations of potential spawning areas. This type of survey is highly unpredictable and amount is driven by the budget and opportunity.

The alternative to spawner/redd counts is to review data from other agencies (e.g., WDFW). The reason for conducting these counts is to help these agencies collect this data. These outside agencies have limited funding and are not able to all of the areas of interest.

Spawning adults or holding adult fish would likely be disturbed by the surveys as the passed through the area. These disturbances are generally less than ten minutes.

The largest danger from spawner/redds surveys is from the disturbance of a redd. There is the danger the surveyors may disturb an unrecognized redd. The surveyor may step on an unseen redd and dislodged or crush some eggs.

H. **Description and Estimates of Take**: Issued permits define a specific number of individuals of each species that can be taken under the approved study or project. You must provide sufficient detail in the attached table (see last page) for NMFS to determine the species, population group, and estimated number of individuals to be taken by each activity. You should also describe the specific life stage, and origin, (and sex, if appropriate) of the listed species targeted. Take into account alternative scenarios identified above in the *Project Description, Purpose, and Significance* section.

Provide a separate table for each project, activity, or location, if appropriate. Attach the table at the end of the application. In addition, include:

1. Describe the recent status and trends of each ESU/species proposed to be taken (include citations where possible). NMFS already possesses information at the ESU level (see various NMFS web sites), so there is no need to repeat it in your application. We are seeking new data here—specifically, status and trend data on any distinct populations the proposed action is likely to affect. Such information will help us evaluate the probable impacts of the proposed research.

   The Gifford Pinchot National Forest does not have the facilities or funding to track populations of fish on Forest, so we are limited to trend estimations from data provided by WDFW, BPA, Tacoma Power, USGS and Pacific Corp.

   Columbia River Chum and Puget Sound Chinook -We have no estimates for Columbia River chum salmon, or Puget Sound Chinook salmon which do not occur on Forest.

   Lower Columbia Steelhead –
   Upper Cowlitz River- Efforts to calculate smolt to adult ratios and egg to smolt survivorship have been confounded, because unmarked hatchery fry were planted above the Cowlitz Falls dam.

   North Fork Lewis River- All anadromous species are currently blocked at Merwin Dam, and all anadromous populations are downstream from the Gifford Pinchot National Forest. Reintroduction efforts are scheduled to begin around 2010. There have been adult introduced above Swift Reservoir, but the attempts to capture smolt were unsuccessful because of limited funding.

   East Fork Lewis River- Steelhead are found on Forest in East Fork Lewis River however, we do not have the facilities to track adult returns and smolt production that are found on the Cowlitz River. In a talking to Jim Byrne with WDFW adult returns are highly correlated with ocean conditions. Chinook and coho salmon are blocked by natural barriers several miles below the Forest Boundary.

Wind River – The ratio of adults entering the system to smolts leaving seems toe less that what is needed for a sustained population.

2. Provide a justification for all potential mortalities by take category. You should explain how you determined the numbers of listed species that would be killed, either intentionally (direct mortality, lethal take) or unintentionally (indirect mortality). You may reference section G.4. in explaining mortality rates.

   All mortalities for any of the species would be unintentional. Snorkel surveys and redd/spawner counts have very little chance of killing individuals. They only chance for these methods to kill an individual would be in the disturbance of an unrecognized redd. When snorkeling is not viable method (ex, max stream depths less than 1 foot) and in places where it is impossible to differentiate between species, electrofishing and/or seining are the only methods that will meet the objectives of the survey. These methods carry some risk of killing fish, but, land management decisions based on incomplete or inaccurate data also carry the risk of killing more individuals.

3. Provide details on how all take estimates, including mortalities, were derived. Include citations when applicable.

   The take estimates were derived from previous field experience with the Level II inventory on the Forest (no citations are available for take based on snorkeling activities on the Forest), and project level inventories (mixture of both snorkeling and shocking, where shocking is a last resort). The Forest rarely electrofishes and is requesting keeping the option to electroshock available should a project analysis necessitate more than fish presence, i.e. species confirmation, areas difficult to snorkel. The best we can provide at this time is an estimate of mortality based on professional judgement.

4. Include a statement as to whether or not any USFWS listed species would be affected. If any would be, include which species and DPS' and the authority you have to take those species (permit, consultation, agreement).

   The Gifford Pinchot has also been sampling for bull trout (*Salvelinus confluentus*). To date this species has been found only in the Lewis River system below lower falls. We do have a Section 10 sampling permit which covers this species.

I. **Transportation and Holding**

1. **Transportation of a Listed Species**: Provide a description of how any live individuals taken from the capture site or other facility (including rescue and relocation activities) will be transported including:

   This not applicable since any captured animals would released within a couple of hundred feet of the site of capture.

2. **Holding of a Listed Species**: Describe the plan for care and maintenance of any live individuals, including a complete description of the facilities where any such individuals will be maintained including:

   Fish will only be held temporarily in five gallon buckets. We will limit the number of individuals to fewer than 25 fry/parr in five gallons of water. We will monitor water temperature and add cold stream water when the temperature reaches 60 ^{o} F.

3. **Emergency contingencies**: Identify emergency contingencies- e.g., backup life support systems, alarm systems, redundant water and oxygen supply, release or destroy decision chains, etc.

   Not applicable.

J. **Cooperative Breeding Program:** You MUST include a statement of willingness to participate in a cooperative breeding program and to maintain or contribute data to a breeding program, if such action is requested.

Gifford Pinchot National Forest is willing to participate in a cooperative breeding program and to maintain or contribute data to a breeding program, if such action is requested.

K. **Previous or Concurrent Activities Involving Listed Species**:

Our pervious sampling permit was number 1175. We have reported mortalities to NOAA/NMFS every year.

L. **Certification**: You must include the following paragraph, exactly as worded, followed by the applicant or responsible party's signature, name, position title, and date:

"I hereby certify that the foregoing information is complete, true and correct to the best of my knowledge and belief. I understand this information is submitted for the purpose of obtaining a permit under the Endangered Species Act of 1973 (ESA) and regulations promulgated thereunder, and that any false statement may subject me to the criminal penalties of 18 U.S.C. 1001, or to penalties under the ESA."

_____ _____

Signature Date

_____

Name and Position Title (print)

Attach résumés here or submit it/them as a separate document.

M. **Length of Time and Cost to Prepare Application (Optional)**: The public burden of these application instructions is evaluated periodically by the Office of Management and Budget under the Paperwork Reduction Act. Your response will help improve the accuracy of the estimates given for evaluation. You may send comments regarding this estimate or any other aspect of this information collection, including suggestions for reducing this burden, to the Chief, Endangered Species Division, at the address under.

This document has taken approximately 60 hour to prepare at a cost of $30 per hour. The description of the status of the species seem to be unnecessary burden, considering the NMFS has the best data to answer this question.

Anticipated Annual Take

Use this table to specify anticipated types and numerical estimates of annual take for listed species during individual research or enhancement activities. Use a separate table for each discrete project or location **and label tables accordingly**. Each row must be explained in the application. All mortalities must be justified. Gary Rule of NMFS informed us that activities associated with snorkel, redd, spawner surveys would not constitute a take activity, therefore this table only reflects take associated with electrofishing and seining.

Location/Project:Gifford Pinchot National Forest

ESU/ Species and population group if appropriate	Life Stage	Origin	Take Activity	Number of Fish Requested #/ 1year study	Requested Unintentional Mortality Mortalities as estimated % of Captures	Research Location	Research Period
Puget Sound Chinook Salmon	Juvenile	Naturally Produced	Capture, handle, release	2	5%	Deschutes and Puyallup Watershed on National Forest	Jan 1, 2007 – Dec 31, 2112
Puget Sound Chinook Salmon	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	10	2%	Deschutes and Puyallup Watershed on National Forest	Jan 1, 2007 – Dec 31, 2112
Lower Columbia River Chinook Salmon	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	1,600	2%	Lower Columbia River Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Lower Columbia River Chinook Salmon	Juvenile	Naturally Produced	Capture, handle, release	600	2%	Lower Columbia River Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Lower Columbia River Steelhead	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	700	2%	Lower Columbia River Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112

ESU/ Species and population group if appropriate	Life Stage	Origin	Take Activity	Number of Fish Requested #/ 1year study	Requested Unintentional Mortality Mortalities as estimated % of Captures	Research Location	Research Period
Lower Columbia River Steelhead	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	300	2%	Lower Columbia River Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Lower Columbia River Coho	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	600	2%	Lower Columbia Basin River on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Lower River Columbia Coho	Juvenile	Naturally Produced	Capture, handle, release	1400	2%	Lower Columbia Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Columbia River Chum	Juvenile	artificially-propagated (hatchery) with clipped adipose fins	Capture, handle, release	0	0	Lower Columbia Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112
Columbia River Chum	Juvenile	Naturally Produced	Capture, handle, release	0	0	Lower Columbia Basin on and adjacent to Gifford Pinchot NH	Jan 1, 2007 – Dec 31, 2112

ESU/Species: List each ESU and Species (and populations, if appropriate) you are requesting to take. Include common and scientific names.

Life Stage: Specify fry, juvenile, smolt, pre-spawned adult, post-spawned adult (also note if live or dead when captured). You may combine juvenile (fry, juvenile, smolt) life stages.

Origin: Specify if the individuals are naturally-produced (wild), artificially-propagated (hatchery) with intact adipose fins, or artificially-propagated (hatchery) with clipped adipose fins.

Take Activity: Specify only one of the following for each line:
Collect for transport (including rescue/salvage)